DOCUMENT RESUME

ED 246 528 EA 016 978

AUTHOR Kimbrough, Jackie; Hill, Paul T.
TITLE Problems of Implementing Multiple Categorical Education Programs.
INSTITUTION Rand Corp., Santa Monica, Calif.
SPONS AGENCY Department of Education, Washington, DC.
REPORT NO ISBN-0-8330-0515-4; RAND/R-2957-ED
PUB DATE Sep 83
CONTRACT 300-79-0522
NOTE 51p.; For a related study, see ED 210 785.
AVAILABLE FROM Publications Sales, Rand Corporation, 1700 Main Street, Santa Monica, CA 90406 (Order No. RAND/R-2957-ED; $4.00; California residents add 6.5 percent sales tax).
PUB TYPE Reports - Research/Technical (143)

EDRS PRICE MF01 Plus Postage. PC Not Available from EDRS.
DESCRIPTORS Block Grants; *Categorical Aid; Class Organization; Classroom Environment; Disadvantaged Youth; Elementary Secondary Education; *Equalization Aid; Federal Aid; *Federal Programs; Federal Regulation; Government School Relationship; *Organizational Effectiveness; *Program Implementation; Public Schools; *Resource Allocation
IDENTIFIERS *Cross Subsidy (Programs); *Interference Effects

ABSTRACT

When federally funded categorical programs for educational equity converge at the school level, difficulties such as resource competition tend to arise. This study addresses interference (categorical and core local program conflicts) and cross-subsidy (categorical fund misuse) problems at district, school, and classroom levels in terms of pervasiveness and intensity. Telephone interviews in 48 school districts, and site interviews in 10 of those districts obtained demographic, financial, and operational, as well as interference and cross-subsidy data. Findings reveal that all districts experience both problems, not only in the face of multiple categorical requirements, but also when schools administer programs imposed by another government agency. At fault are federal program structuring and local administrative habit, both of which encourage separation of categorical and core programs, thus adversely affecting services to disadvantaged children. Solution recommendations include not assigning to separate categories students who can be assigned to regular classrooms. An appendix of success stories and references follow. (KS)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

U.S. DEPARTMENT OF EDUCATION
NATIONAL INSTITUTE OF EDUCATION
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

X This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official NIE position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

Tom Cockrell

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

ED246528

Problems of Implementing Multiple Categorical Education Programs

Jackie Kimbrough, Paul T. Hill

EA 016 978

35th Year Rand

This research was supported at least in part by federal funds from the U.S. Department of Education under Contract No. 300-79-0522.

ISBN 0-8330-0515-4
83-15929

The Rand Publications Series: The Report is the principal publication documenting and transmitting Rand's major research findings and final research results. The Rand Note reports other outputs of sponsored research for general distribution. Publications of The Rand Corporation do not necessarily reflect the opinions or policies of the sponsors of Rand research.

Published by The Rand Corporation

R-2957-ED

Problems of Implementing Multiple Categorical Education Programs

Jackie Kimbrough, Paul T. Hill

September 1983

Prepared for the
U.S. Department of Education

35th Year

Rand
SANTA MONICA, CA. 90406

PREFACE

This report, the second of two documenting research on the aggregate effects of federal categorical education programs, assesses the incidence of the problems of multiple program implementation identified in the earlier study[1] and the severity of these problems for school operations, students, and staff. The research for both studies was supported by the Office of the Deputy Under Secretary for Planning, Budget, and Evaluation, U.S. Department of Education. The reports are addressed to policymakers who develop and regulate categorical programs and civil rights requirements and to local administrators who carry them out.

[1]See Jackie Kimbrough and Paul T. Hill, *The Aggregate Effects of Federal Education Programs*, The Rand Corporation, R-2638-ED, September 1981.

SUMMARY

BACKGROUND

This report supplements the research presented in Kimbrough and Hill (1981), which described the problems encountered by school districts and schools in implementing multiple categorical programs. The present study provides supplementary quantitative evidence regarding the incidence and severity of the problems, the number of students and staff affected, and the effects on educational services.

The earlier study identified the two broad problems encountered by school districts and schools as interference and cross-subsidy. *Interference* refers to the conflict between categorical programs and the core local program (that is, the instruction and extracurricular activities that a school district normally provides). We identified six types of interference:

1. Children miss core classroom instruction because of pullouts.
2. Conflicts between core and categorical programs lead to staff tensions.
3. Categorical programs require excessive administrative time.
4. Categorical programs result in minority student segregation.
5. Core and categorical programs are incompatible.
6. The categorical program replaces the core program.

Cross-subsidy involves the use of categorical program funds intended for one beneficiary group to provide services for another group. We found four types of cross-subsidy:

1. Teaching staff funded by one categorical program provide service in another.
2. Students eligible for one program receive another program.
3. Unfunded program administrative duties are assumed by funded program staff.

4. Resources are diverted from funded programs to pay for unfunded programs.

STUDY DESIGN AND RESEARCH METHODS

This study sought to answer the following questions:

1. How common are interference and cross-subsidy? What forms do they usually take? In what kinds of districts are they most likely to occur?
2. In districts experiencing interference and cross-subsidy, how severe are the problems at the school level? Are some types of interference and cross-subsidy more prevalent than others? What kinds of schools experience interference and cross-subsidy?
3. In schools experiencing interference and cross-subsidy, how severe are the consequences for students and staff? What percentage of students are affected? What educational services are lost and for how long?

We answered the first set of questions by conducting a telephone survey of categorical program coordinators in 48 representative school districts. We answered the second and third sets of questions by conducting site surveys in ten of the 48 school districts and in two schools in each of the ten districts. We interviewed personnel in the district control office and, at each school, the principal, coordinators of all categorical programs, two regular classroom teachers, and at least one categorical program teacher.

RESULTS OF THE TELEPHONE SURVEY AND SITE STUDIES

The telephone survey revealed both interference and cross-subsidy in all types of school districts. More than one-half of the districts experienced at least three types of interference; one-third experienced at least three types of cross-subsidy.

The site studies found both interference and cross-subsidy in all 20 schools in the sample. In fact, each school experienced at least two types of interference and one type of cross-subsidy.

The most common types of interference involved children missing core instruction because of frequent pullouts, found in 18 of the 20 schools, and staff tensions due to conflicts between core and categorical programs, found in 15 schools. The two most common types of cross-subsidy--teaching staff funded by one categorical program providing services in another and students eligible for one program receiving another program instead--occurred in 16 schools.

CONCLUSIONS AND RECOMMENDATIONS

Contrary to our expectations, interference and cross-subsidy may occur not only when there is a multiplicity of categorical requirements, but whenever a school system administers programs imposed by another government agency. One categorical program alone can create interference if local administrators fail to coordinate it with the core instructional program. In a district that receives federal grant funds for any purpose, a single unfunded requirement can create the incentive for cross-subsidy.

We encountered a small number of schools that successfully managed the use of resources from the existing multiple categorical programs. These schools scheduled categorical program pullouts to ensure that students did not miss regular academic courses and, in some cases, sent categorical program specialists into the regular classroom to enhance the regular classroom teacher's efforts on behalf of disadvantaged students. (An appendix describes several success stories in the management of multiple categorical programs.)

Federal and state policymakers who want to continue to help disadvantaged children must find a way to provide localities with the grant funds that such services require, create regulatory pressures ensuring that the funds are used for the disadvantaged, and avoid the problems documented in this report. Disadvantaged students should, if possible, be assigned to regular classrooms, rather than to separate categories dictated by the structure of federal grants and requirements.

Extra revenues provided by categorical programs should be used to adapt regular classroom services so that disadvantaged children can benefit from them. Federal and/or state regulations must provide verifiable standards to ensure that program funds truly increase the levels of resources available in classrooms that serve disadvantaged children.

The 1981 Educational Consolidation and Improvement Act is ripe for refinement, through both statutory amendment and regulation. If that effort were broadened to include all existing major categorical programs, it might well produce a workable new federal program model.

ACKNOWLEDGMENTS

The authors thank the following individuals for their contributions to this report: Judith Anderson, U.S. Department of Education; Richard Elmore, University of Washington; and Linda Darling-Hammond, Arthur Wise, and Richard Shavelson, The Rand Corporation. They also thank the school superintendents, principals, and teachers throughout the country who were interviewed with the understanding that they not be named.

CONTENTS

PREFACE iii

SUMMARY v

ACKNOWLEDGMENTS ix

TABLES xiii

Section

I. INTRODUCTION 1

Study Background 2
Study Design 5
Research Methods 6

II. RESULTS OF THE TELEPHONE SURVEY AND SITE STUDIES 14

Telephone Survey Findings 14
Site Study Findings 15

III. CONCLUSIONS AND RECOMMENDATIONS 32

Appendix

SOME SUCCESS STORIES 37

REFERENCES 39

TABLES

1. Incidence of Interference and Cross-Subsidy in 48 Sample Districts 14

2. Number of Types of Interference and Cross-Subsidy Found in 48 Sample Districts 15

3. Number of Types of Interference and Cross-Subsidy Found in 20 Sample Schools 16

4. Prevalence of Types of Interference in 20 Sample Schools ... 17

5. Prevalence of Types of Cross-Subsidy in 20 Sample Schools .. 17

6. Percentage of Students Pulled Out of 36 Sample Classrooms for Categorical Instruction 19

7. Core Classroom Time Missed by Students Pulled Out to Receive Categorical Program Instruction 20

8. Core Classroom Activities Missed by Students Pulled Out to Receive Categorical Program Instruction 21

9. Academic Courses Missed by Students Pulled Out to Receive Categorical Program Instruction As Reported by 30 Classroom Teachers 22

10. Hours Per Day Spent by 36 Regular Classroom Teachers with Their Entire Class 23

11. Actual Classroom Pullout Schedule 24

12. Teaching Staff Cross-Subsidies: Donor and Recipient Relationships Among Categorical Programs 28

13. Student Cross-Subsidies: Donor and Recipient Relationships Among Categorical Programs 30

14. Percentage of Eligible Students Excluded from Categorical Program Services in 16 Schools Experiencing Student Cross-Subsidy 31

I. INTRODUCTION

Title I of the Elementary and Secondary Education Act (ESEA) was enacted in 1965 to provide funds and services for low-achieving, poor children. Congress has since adopted numerous other categorical programs[1] and civil rights requirements[2] to promote educational equity for low-achieving children in low-income schools, handicapped children, and language-minority children.

Individually, many of these programs have succeeded in providing services to children potentially at a disadvantage in the educational system. However, more than half of the nation's school districts operate two or more federal categorical programs (Goor et al., 1978-1979); virtually all districts implement federal civil rights requirements; and many districts operate at least one state categorical program.

These categorical programs, which have been enacted, funded, and administered separately, converge at the school level, where principals and teachers must create an integrated educational program from a disparate set of resources and requirements. Thus, although individual programs may succeed, the interactions among such programs tend to create problems. For example, teachers and administrators have

---

[1]Categorical programs are educational services designed to supplement a district or school's regular educational program. According to Berke and Demarest (1979), the programs may focus on specific groups (e.g., limited English-speaking children), particular services (librarian or teacher training), or specific subject areas (vocational or metric education). In connection with the priority given to equal educational opportunity, programs that focus on these target groups have gained in importance. Our research addressed itself to the aggregate effects of these programs.

[2]Unlike categorical programs, civil rights requirements do not provide specific program services. Like some categorical programs, however, they are designed to promote educational equity among such groups as females (Title IX of the Education Amendments of 1972) and the handicapped (Section 504 of the Rehabilitation Act of 1973). Also like categorical programs, they are implemented by local education agencies, and they impose financial and administrative burdens that must be met through local resources.

complained that at the school level, the programs compete for scarce resources, impose administrative burdens on the staff, and interfere with class scheduling and instruction.

Our earlier study of the aggregate effects of federal education programs (Kimbrough and Hill, 1981) described the problems encountered by school districts and schools in implementing multiple categorical programs. That study did not, however, address itself to the pervasiveness and severity of those problems. The present study provides supplementary quantitative evidence regarding the incidence of the problems, the number of students and staff affected, and the effects on educational services.

STUDY BACKGROUND

The earlier study identified the two broad problems encountered by districts and schools in implementing multiple categorical programs as interference and cross-subsidy. *Interference* refers to the conflict between categorical programs and the core local program (i.e., the instruction and extracurricular activities that a school district normally provides).[3] We found in the earlier study that categorical programs interfered with the core local program by:

1. Interrupting core classroom instruction. In some schools, children were pulled out of their regular classes to receive categorical program services so often that the teacher was unable to provide the amount of regular class instruction required by state law.
2. Replacing core classroom instruction with categorical program instruction. Some schools provided no regular reading or mathematics instruction beyond that offered by categorical programs.

[3]The terms *regular local program* and *core local program* refer to the combination of instructional, support, and extracurricular activities that school districts traditionally provide. Although the content of the core local program varies from place to place, it is usually understood to be the services provided to students who are not the beneficiaries of federal or state categorical programs.

3. Using instructional methods and materials that conflicted with those used in the core local program.
4. Imposing administrative burdens that diverted staff attention from instruction.
5. Causing staff conflicts, in particular between regular classroom teachers and specialists who deliver categorical services.
6. Segregating minority students for a large part of the day.

Cross-subsidy involves the use of categorical program funds intended for one beneficiary group to provide services for another group. When federal regulations impose unfunded requirements (i.e., obligations to provide special services for which no federal funds are appropriated), some local educational agencies (LEAs) divert resources from funded programs to provide the services mandated by the unfunded requirement. We found in the earlier study that categorical programs subsidized other programs by:

1. Providing services purchased by one program to students who qualified for another program (e.g., offering remedial reading instruction to handicapped children rather than to the non-handicapped, low-achieving children for whom the funds were intended).
2. Changing the services offered by a funded program to fulfill an unfunded requirement (e.g., substituting bilingual instruction for English-language remedial instruction).
3. Diverting administrative and teaching staff from one program to fulfill the requirements of another program.
4. Transferring funds from accounts holding federal grants to accounts used for purposes not authorized by the federal grant.

Our earlier study documented the problems that some districts and schools experienced while implementing multiple categorical programs. We found at least one type of interference and one type of cross-subsidy in each school district that we visited for that study.

The policy relevance of the earlier study was reduced by several limitations of its design. The study was small and exploratory. It looked for the phenomenon of interference and cross-subsidy in multiple-problem districts--that is, where they were most likely to occur. Furthermore, the study was designed to detect only the presence or absence of interference and cross-subsidy, rather than to estimate the numbers of teachers and students affected or the amounts of instructional time lost by students.

The problems of interference and cross-subsidy are potentially important. If interference is widespread, many children--both categorical program beneficiaries and others--may lose valuable instruction. If cross-subsidy is prevalent, disadvantaged children may not receive federally funded services to which they are entitled.

Recent changes in federal education laws have not eliminated the causes of interference and cross-subsidy. Although many smaller programs were consolidated in the 1981 Education Consolidation and Improvement Act (ECIA), the major service programs that our previous study examined were left intact. ESEA Title I was renamed and streamlined, but its basic goals and procedures remained the same; the Education for All Handicapped Children Act (PL 94-142) and the Bilingual Education Act (ESEA Title VII) were not changed. Of the four categorical programs that provide the most money, serve the most students, and impose the most detailed regulations and administrative procedures, only the Emergency School Assistance Act, which provided funds to help school districts implement desegregation plans, was fundamentally changed. The changes in federal education laws therefore have not reduced the potential importance of our earlier findings.

This study seeks to determine whether our earlier findings apply broadly to all types of school districts and schools that receive federal funds or only narrowly to multiple-problem districts like the ones covered by our first study. The remainder of this section describes the design and research methods of the present study. Section II provides the study results and Section III, our conclusions and recommendations. An appendix offers some success stories.

STUDY DESIGN

Research Questions

This study was designed to answer three basic sets of questions:

1. Among the nation's school districts, how common are interference and cross-subsidy? What forms do interference and cross-subsidy usually take? What kinds of districts are most likely to experience interference and cross-subsidy?
2. In districts experiencing problems of interference and cross-subsidy, how severe are the problems at the school level? Are some types of interference and cross-subsidy more prevalent in schools than other types? What are the characteristics of schools that experience interference and cross-subsidy?
3. In schools experiencing interference and cross-subsidy, how severe are the consequences for students and school staff? What percentage of students are affected by interference and cross-subsidy? What educational services are lost and for how long?[4]

Research Approach

The research questions required that we study interference and cross-subsidy at three levels of the educational system: the school district, school, and classroom. We answered the first set of research questions by means of a telephone survey of a nationally representative sample of 48 school districts. Respondents for the telephone survey were categorical program coordinators in the 48 districts.

We answered the second and third sets of research questions by means of intensive site studies in schools and classrooms. We visited ten of the 48 school districts contacted for the telephone survey and two schools in each of the ten districts.

---

[4]In both this and our previous study, we measured the effects of interference and cross-subsidy in terms of changes in instructional services delivered to students. We did not administer achievement tests, examine grades, or observe students' subsequent academic performance. Thus, we always demonstrate effects on students in terms of the kinds and amounts of instructional services gained or lost.

During the site visits, we conducted interviews in the district control office and at two schools, each of which operated at least two federal categorical programs. At each school, we also interviewed the principal, coordinators of all categorical programs at the school, two regular classroom teachers, and at least one teacher who delivered categorical program services.

Figure 1 illustrates the basic steps in the research strategy. The successive samples of districts, schools, and classrooms (left column) are shown in relation to the data collection steps (right column). Sampling procedures, interview questions, and field work procedures are described in the next subsection.

RESEARCH METHODS

Telephone Survey

The telephone survey was designed to determine:

1. Whether interference and cross-subsidy are rare or common occurrences among school districts.
2. Whether districts exhibit one or several types of interference and/or of cross-subsidy.
3. What, if any, district characteristics are associated with interference and cross-subsidy.

Sample Selection. To address these issues, we selected a nationally representative sample of 48 school districts in 12 states. First, we obtained data on the following variables for each of the 50 states:[5]

[5]The information on which state-level variables were based was obtained from 1980 census data and from the school district Universe File. For sample selection purposes, we created the following levels for each variable: percent of population in urban areas--three levels; percent minority population--four levels; public school enrollment--three levels; per pupil expenditures--four levels. Each level of each variable represented approximately equal numbers of values, and we sampled proportionately from each category.

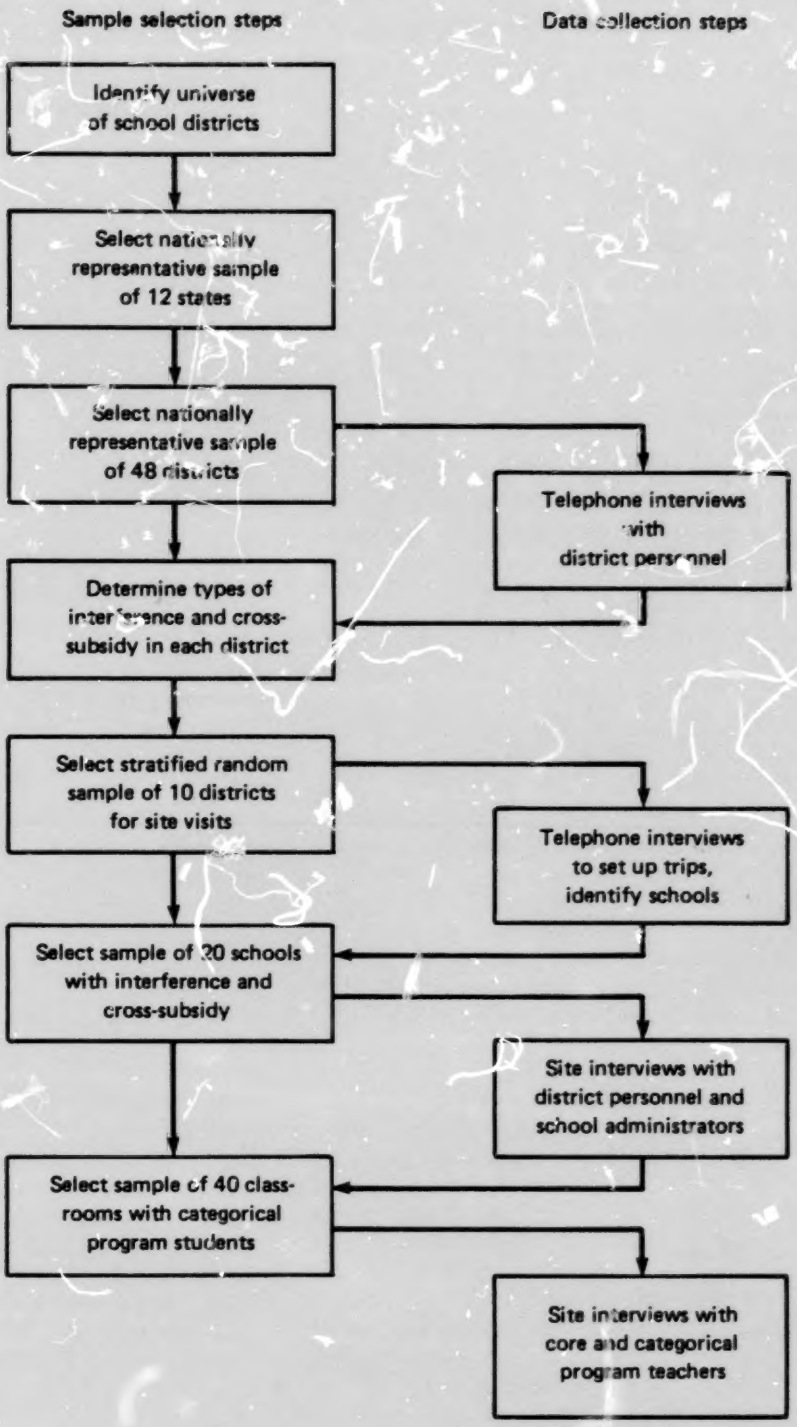
Sample selection steps
Data collection steps
Identify universe of school districts
Select nationally representative sample of 12 states
Select nationally representative sample of 48 districts
Telephone interviews with district personnel
Determine types of interference and cross-subsidy in each district
Select stratified random sample of 10 districts for site visits
Telephone interviews to set up trips, identify schools
Select sample of 20 schools with interference and cross-subsidy
Site interviews with district personnel and school administrators
Select sample of 40 classrooms with categorical program students
Site interviews with core and categorical program teachers

Fig. 1 — Basic steps in research strategy

1. Percentage of state population residing in urban areas
2. Percentage of minorities in state population
3. Public school enrollment
4. Per pupil education expenditures.

Using a fractional factorial design,[6] we randomly selected 12 states balanced with respect to the different levels of four stratifying variables. We then selected four districts from each sample state (again using the methods of fractional factorial sampling), choosing from lists stratified on two dimensions: district enrollment and total federal funds received by the district in 1976.[7]

The resulting sample had equal numbers of districts with low and high levels of federal funds. Moreover, districts were distributed within enrollment categories to roughly parallel national enrollment statistics.[8] The largest proportion of districts--33 percent--had five

---

[6]The small number of states made it difficult to obtain a sample that was representative with respect to many variables. For a completely stratified random sample, we would have been limited to a maximum of three variables (2x3x2) for selecting 12 states. The fractional stratified sample, however, allowed us to use four stratifying variables while ensuring that all marginal two-way tables were (nearly) balanced. In adopting the flexible fractional factorial technique, we used two variables at a time to satisfy the stratification requirements. Thus, while each state represented different levels of only two variables, the 12 states together were balanced with respect to the different levels of the four stratifying variables.

[7]These variables were based on data provided through the U.S. Department of Education's Elementary and Secondary Education General Information System (ELSEGIS) file, the census of Local Government Finances, and the school district Universe File. The number of categorical programs in each district did not appear on any nationwide file of districts. Thus, level of federal funds served as a proxy variable for a number of categorical programs. The variable district federal funds were divided into two levels--high and low--based on the range of federal funds in each state. The district enrollment variable was divided into five levels corresponding to those used in the data files. Although most school districts have fewer than 5000 students, we sampled proportionately rather than disproportionately from district enrollment categories. This approach provided us with approximately equal numbers of districts per cell and allowed a better test of differences in the incidence of interference and cross-subsidy by district size.

[8]National School Boards Association Local Public School Survey, 1976. Sixty percent of the districts had enrollments of under 10,000

or six state and federal categorical programs; 29 percent had three or four programs; and 21 percent had seven or eight programs. Ten percent of the districts operated nine or more programs, while only six percent operated one or two programs. The number of federal categorical programs was positively related to district enrollment ($r = 0.64$, $p < 0.01$); and to the percentage of minority enrollment ($r = 0.30$, $p < 0.05$).

Data Collection Procedures. We contacted the administrative office in each of the 48 districts to identify the district's coordinator of categorical programs. In telephone interviews with the coordinators of categorical programs, we asked about the existence of practices that our earlier study had proved were reliable indicators of interference and cross-subsidy.[9] From these responses, we made an initial estimate of the presence of interference and cross-subsidy, the types, and their severity.

To examine the relationship between district characteristics and incidence of interference and cross-subsidy, we obtained the following types of district-level context data:

- Demographic data, including urban/rural status; number of schools in the district; total district enrollment; and percentage of enrollment represented by minority students.

---

students, 21 percent had 10,000 to 24,999 students, and 19 percent had 25,000 students or more. Low-minority districts were well represented in the sample: 42 percent of the districts had up to 10 percent minority students; 24 percent of the districts had from 11 percent to 35 percent minority students; 12 percent of the districts had from 36 percent to 66 percent minority students; and 22 percent of the districts had 67 percent or more minority students.

[9]Telephone survey data were scored in the following manner. For interference and cross-subsidy scores, we summed the types of interference and types of cross-subsidy reported by each district. Interference scores ranged from 0 to 6, with 6 representing maximum interference. Cross-subsidy scores ranged from 0 to 4, with 4 representing maximum cross-subsidy. Thus, numerical values for interference and cross-subsidy represented the number of different types of each problem experienced by a district. Severity scores for interference and cross-subsidy ranged from 0 to 3, with 0 representing "not at all severe" and 3 representing "very severe."

- Financial data, including total operating budget; percentage of budget generated by federal, state, and local sources; per pupil expenditures; and discretionary funds available.
- Operational data, including number and type of federal categorical programs; number and type of state categorical programs; funding level of each program; and number of schools and students served by each program.

On the average, interviews were completed within 45 minutes. In most districts, all of the above information, including the financial information, was provided by the coordinator of categorical programs. In a few districts, however, we also interviewed a budget officer to obtain this financial information.

Site Studies

The site studies were designed to determine the severity of interference and cross-subsidy in schools and in individual classrooms in those schools. At the school level, we wanted to identify the most prevalent types of interference and cross-subsidy. At the classroom level, we wanted to assess the effects of interference and cross-subsidy on instruction.

Sample Selection. We selected a stratified random sample of ten districts from the original sample of 48. We stratified the 48 districts on the following variables: enrollment, percentage of minority students, and ratio of federal to other-source funds. We then selected ten districts, again using the method of fractional factorial sampling.

The resulting sample contained equal numbers of districts with low (n = 5) and high (n = 5) percentages of minority enrollment, as well as equal numbers of districts with low (n = 5) and high (n = 5) levels of federal funds. Four districts had enrollments of under 10,000 students, four had more than 25,000 students, and two had 10,000 to 24,999 students.[18]

[18]The ten districts in the site survey sample had an average enrollment of 31,264 students. Forty percent of the districts had fewer

As in the telephone survey sample, the number of categorical programs operated by a district was positively related to district enrollment ($r = 0.73$, $p < 0.01$) and to percent of minority enrollment ($r = 0.49$, $p < 0.05$) at a somewhat greater magnitude than in the sample of 48 districts.

Site Visit Procedures. Site visits lasting two-and-one-half to three days were made to each of the ten sample districts. Interviews were conducted at both the district and school level; open-ended topic guides served as the basis of all interviews. District-level respondents included the assistant or associate superintendent in charge of federal programs, the coordinator of at least one state categorical program, and the coordinator of at least one federal categorical program.[11]

Topics discussed with district-level program coordinators included:

- Presence or absence of interference and cross-subsidy at the district level
- District policy regarding multiple funding of teaching positions
- District policy regarding multiple programs or a single program for multiple eligible children

---

than 10,000 students, 20 percent had 10,000 to 24,999 students, and 40 percent had 25,000 or more students. As in the telephone survey sample, low-minority districts were well represented, with 40 percent of the districts having fewer than 10 percent minority students. Ten percent of the districts had minority enrollments of 10 to 35 percent; 30 percent had minority enrollments of 36 to 66 percent; and 20 percent of the districts had 67 percent or more minority students. The average minority enrollment was 36 percent. Thirty percent of the districts had three or four programs; 20 percent had five or six programs; 50 percent had seven or eight programs; and none had fewer than three programs.

[11]State categorical programs typically consisted of a bilingual program and a compensatory education program. Federal categorical programs included compensatory education (Title I, ESEA), migrant education (Title I, ESEA), special education (PL 94-142), basic and pilot bilingual education (Title VII, ESEA; Title VII, ESAA), desegregation assistance (Title VII, ESAA), Indian education (Johnson O'Malley Act and Title IV), and Indochinese refugee education (Indochinese Refugee Act).

- District policy regarding multiple pullouts and protected time
- District policy regarding distribution of programs to schools
- District demographics (including enrollment, minority percentage, and per pupil expenditures)
- Number and type of state and federal categorical programs
- Funding level and number of students served by each program.

In each district, we visited two elementary schools, each of which operated at least two state and/or federal categorical programs.[12] Our interviews with school principals and teachers covered:

- Presence or absence of the six types of interference
- Presence or absence of four types of cross-subsidy
- School demographics (including enrollment, minority percentage, and per pupil expenditures)
- Number and type of state and federal categorical programs
- Funding level and number of students served by each program
- Whether children were served by all programs for which they were eligible
- Multiple funding of teachers and aides.

We interviewed two classroom teachers whose students participated in categorical programs and one categorical program teacher for each program implemented in the school.[13] These interviews explored the severity of the consequences of interference and cross-subsidy for

[12]Of the 20 elementary schools in the sample, five had fewer than 300 children, eight had 350 to 549 children, and seven had from 550 to 750 children; the average enrollment was 445. Half of the schools had from 36 to 66 percent minority students; four schools had fewer than 10 percent minority students; three had from 11 to 35 percent minority students; and three had from 67 to 100 percent minority students. Whereas the districts tended to have five or more state and federal categorical programs each, most schools (70 percent) had three or four programs. Thus, while each district averaged 6.8 programs, each school averaged only 3.7 programs. Four schools had five or six programs, and only two schools had one or two programs. No school had more than six programs. Interestingly enough, school-level analysis of categorical programs and percentage of minority enrollment did not support the district-level analyses. Specifically, no relationship was found

students and staff.

Topics discussed with regular program teachers and categorical program teachers included:

- Presence or absence of each of six types of interference
- Presence or absence of each of four types of cross-subsidy
- Percentage of children in classroom who miss core instruction
- Specific core classes missed
- Amount of instruction time missed
- Effect on staff of scheduling problems and administrative burdens
- Percentage of eligible children who lose services when funds are diverted from one program to another.

On the average, we interviewed 30 respondents per district and 15 respondents per school. Each interview lasted 30 to 45 minutes.

---

between the number of categorical programs and the percentage of minority enrollment.

[13]The classroom sample consisted of 40 core program classrooms (two in each of the 20 elementary schools). Because we have incomplete classroom characteristics for two schools, the description is based on 36 schools. Thirty-nine percent of these classrooms were third and fourth grade; 33 percent were first and second grade; and 28 percent were fifth and sixth grade. The number of students per classroom ranged from 12 to 31. Most classrooms (64 percent) had 20 to 25 students. Classrooms were served by one to five categorical programs, with an average of 2.8 categorical programs per classroom. This figure is much lower than either the district or school averages, which were 6.8 and 3.7 programs, respectively.

II. RESULTS OF THE TELEPHONE SURVEY AND SITE STUDIES

TELEPHONE SURVEY FINDINGS

The telephone survey, conducted at the school district level, revealed both interference and cross-subsidy in all types of school districts. As Table 1 indicates, at least one of the six types of interference was found in 83 percent of the 48 sample districts and at least one of the four types of cross-subsidy was found in every district.

Most districts experienced more than one type of interference and more than one type of cross-subsidy. As Table 2 indicates, more than one-half of the districts (58 percent) experienced three or more types of interference and two-thirds experienced at least two types of cross-subsidy.

To identify the characteristics of districts most likely to experience interference and cross-subsidy, we computed Pearson correlations between specific characteristics of the 48 telephone survey districts (e.g., size, urban status, minority percentage, and number of categorical programs) and both interference and cross-subsidy scores. Contrary to our expectations, interference and cross-subsidy were not limited to large districts, high minority districts, and districts with

Table 1

INCIDENCE OF INTERFERENCE AND CROSS-SUBSIDY IN 48 SAMPLE DISTRICTS

	% of Districts in Which Found
Interference	
One or more types	83
No types	17
Cross-Subsidy	
One or more types	100
No types	0

Table 2

NUMBER OF TYPES OF INTERFERENCE AND CROSS-SUBSIDY FOUND IN 48 SAMPLE DISTRICTS

	% of Districts in Which Found
No. of types of interference	
1	20
2	22
3	28
4	22
5	8
6	0
No. of types of cross-subsidy	
1	33
2	33
3	27
4	6

large numbers of categorical programs. In fact, they occurred as frequently in small districts, low minority districts, and districts with few categorical programs. District per pupil expenditures, however, were positively related to interference ($r = 0.73$, $p < 0.01$) and to cross-subsidy ($r = 0.52$, $p < 0.05$). Again unexpectedly, interference and cross-subsidy were positively related ($r = 0.64$, $p < 0.01$).

SITE STUDY FINDINGS

The school-level data collected in the site studies revealed the degree to which schools experienced interference and cross-subsidy, the prevalence of interference and cross-subsidy, and school characteristics related to the two phenomena. The classroom-level data showed the percentage of students affected by interference and cross-subsidy and the consequences of interference and cross-subsidy for students and teachers.

School Level

The site studies found evidence of interference and cross-subsidy in all 20 schools in the sample. The typical school experienced three or four types of interference and two or three types of cross-subsidy (see Table 3).

The types of interference at the school level were not equally prevalent, nor were the types of cross-subsidy. As Table 4 indicates, the most common type of interference was "children missing core instruction because of frequent pullouts," with 18 of the 20 schools reporting this problem. "Staff tensions" due to categorical programs were also found to be common.

Table 5 shows the prevalence in the sample schools of various types of cross-subsidy. The two most common types of cross-subsidy involved the allocation of teachers' and students' instructional time. The other two types of cross-subsidy--the diversion of categorical teachers' time into unfunded administrative tasks and the transfer of funds out of categorical program accounts--occurred infrequently or not at all at the

Table 3

NUMBER OF TYPES OF INTERFERENCE AND CROSS-SUBSIDY FOUND IN 20 SAMPLE SCHOOLS

	% of Schools in Which Found
No. of types of interference	
1	0
2	20
3	30
4	25
5	15
6	10
No. of types of cross-subsidy	
1	20
2	60
3	20
4	0

Table 4

PREVALENCE OF TYPES OF INTERFERENCE IN 20 SAMPLE SCHOOLS

Type of Interference	% of Schools in Which Found
Children miss core instruction because of the frequent pullouts	90
Conflicts between core and categorical programs lead to staff tensions	75
Categorical programs require excessive administrative time	50
Categorical programs result in minority student segregation for long periods	35
Core and categorical programs are incompatible	35
Categorical program replaces core program	15

Table 5

PREVALENCE OF TYPES OF CROSS-SUBSIDY IN 20 SAMPLE SCHOOLS

Type of Cross-Subsidy	% of Schools in Which Found
Teaching staff funded by one categorical program provide service in another	80
Students eligible for one program receive another program instead	80
Unfunded program administrative duties are assumed by funded program staff	40
Resources are diverted from funded programs to pay for unfunded programs	0

school level. (The latter two types of cross-subsidy probably operate largely at the district level, where administrative staffing of the unfunded or underfunded programs--e.g., Title IX, Section 504 of the Rehabilitation Act--originate. Similarly, the transfer of funds into unfunded accounts is also likely to be handled by district administrators.)

To identify factors related to interference and cross-subsidy, we computed Pearson correlations between the demographic, fiscal, and

operational characteristics of the 20 schools and both interference and cross-subsidy scores. We also correlated characteristics of the ten site survey districts with scores for both interference and cross-subsidy. We found that interference and cross-subsidy were not related to school characteristics such as school size and minority percentage. However, interference was positively related to the number of categorical programs operated by the school ($r = 0.53$, $p < 0.01$). Cross-subsidy was not related to the number of categorical programs operating in the schools. Scores for interference and cross-subsidy were also positively related to each other ($r = 0.58$, $p < 0.01$).

Classroom Level

The site study findings regarding the consequences of interference and cross-subsidy for students and teachers are based on data collected in 36 classrooms, supplemented by data from school principals and categorical program teachers. Consequences were measured in terms of (1) the percentages of students and teachers affected by each type of interference and cross-subsidy and (2) the amounts of instructional time lost because of the two phenomena.

Interference. As noted above, a categorical program interferes with the core program when it hinders the implementation of the program by the staff and/or reduces instructional services for students. Each of the 20 schools in the sample experienced at least two of the six types of interference (see Tables 3 and 4, above). Here we describe the severity of each type of interference at the classroom level.

1. Children miss core instruction because of the frequency of categorical pullouts.

Pullouts involve removing students from the regular instructional group to give them special categorical instruction. Students inevitably miss some regular class instruction when they are pulled out. Although pullouts are not required by regulation, they permit local officials to demonstrate unambiguously that they are providing the federally mandated and funded special services for the disadvantaged. (See, for example, National Institute of Education, 1977, and Silverstein, 1977.) Eighteen

of the 20 schools in our sample used the pullout method for categorical program implementation. (The other two schools sent categorical program teachers into the regular classrooms to work in collaboration with the regular classroom teacher.)

Pullouts may pose problems in at least two ways. First, students may be pulled out of a core classroom so frequently or for such extended periods that they fail to receive a substantial portion of the basic core curriculum. Conversely, teachers may have difficulty teaching the core curriculum because of the disruption caused by multiple pullouts.

Table 6 illustrates the prevalence of pullouts. From one-fourth to one-half of the students were pulled out of 42 percent (15) of the regular classroom each week to receive services funded by a categorical program. More than three-quarters of the students were pulled out of 16 percent (6) of the regular classrooms.

The amount of time students were pulled out of class varied by categorical program type. Specifically, programs like Title I reading and mathematics, Title I bilingual, Title I migrant, ESAA basic and pilot, Johnson-O'Malley, state compensatory education, and the Indian Elementary and Secondary School Assistance Act tended to provide instruction from two to five times weekly, with classes lasting from 20 minutes to one hour. Special education, bilingual, and English as a second language (ESL) classes tended to meet for longer sessions. Learning-disabled students pulled out of core classes for special education typically spent from 40 minutes to 2.5 hours per session three

Table 6

PERCENTAGE OF STUDENTS PULLED OUT OF 36 SAMPLE CLASSROOMS FOR CATEGORICAL INSTRUCTION

% of Students Pulled out	% of Classrooms From Which Pulled Out
0 to 25	22
26 to 50	42
51 to 75	19
76 to 100	16

to five times per week. ESEA bilingual, state bilingual, and ESL classes tended to meet four to five times weekly, 1 to 2.5 hours per session.

Table 7 shows the amount of time lost each week by students who were pulled out of regular classrooms to receive services under the three major categorical programs. Students pulled out for Title I spent less time in categorical instruction than students pulled out for special education or bilingual and ESL classes. On the average, special education students spent more time out of their regular classroom than did students who received Title I or bilingual and ESL instruction.

Students pulled out of classrooms for Title I spent an average of 4.62 hours per week in categorical instruction. Students pulled out for special education spent an average of 7.07 hours weekly in categorical instruction, while bilingual and ESL students spent an average of 5.78 hours weekly in categorical instruction. Instructional time in most of the elementary schools ranged from 3.5 to 5 hours daily. Using an

Table 7

CORE CLASSROOM TIME MISSED BY STUDENTS PULLED OUT TO RECEIVE CATEGORICAL PROGRAM INSTRUCTION

Hours per Week Missed	% of Students Receiving		
	Title I[a]	Special Education[b]	Bilingual and ESL[c]
0 to 3.99	55	29	42
4 to 5.99	18	23	5
6 to 10.99	23	29	37
Over 11	3	18	16

[a]Students in 34 of the 36 classrooms were pulled out for Title I instruction.

[b]Students in 17 classrooms were pulled out for special education.

[c]Students in 19 classrooms were pulled out for bilingual and ESL instruction.

average of 4.25 hours in the instructional day, we find that students in Title I were pulled out of the core program slightly more than one day per week; students in special education are pulled out somewhat more than 1.5 instructional days per week; and students receiving bilingual and ESL instruction were pulled out somewhat more than 1.25 instructional days per week.

Regular classroom teachers reported the types of activities missed by categorical program students who were receiving Title I, special education, and bilingual and ESL instruction. Table 8 shows the academic courses (e.g., reading, mathematics, science) and nonscademic courses (art, physical education, and band) missed by students pulled out of regular classrooms to receive categorical instruction.

As is evident from Table 8, the majority of students in the three major categorical programs missed some core academic instruction when they were pulled out of their regular classrooms. There were few differences among the three categorical programs with regard to the type of activities missed. However, students in bilingual and ESL

Table 8

CORE CLASSROOM ACTIVITIES MISSED BY STUDENTS PULLED OUT TO RECEIVE CATEGORICAL PROGRAM INSTRUCTION

	% of Students Receiving		
Activity Missed	Title I[a]	Special Education[b]	Bilingual and ESL[c]
Academic courses	88	76	65
Nonacademic courses	8	12	6
None	4	12	29

[a] N = 34 classrooms.

[b] N = 17 classrooms.

[c] N = 17 classrooms. (Two classrooms from which students were sent to bilingual and ESL instruction were excluded from analysis because of missing data for this item.)

instruction were less likely to miss academic instruction than Title I or special education students. Our data do not provide an explanation for this difference.

The finding that few students missed nonacademic courses may reflect district and school scheduling priorities. Faced with scheduling problems posed by multiple classroom pullouts, two districts prioritized the pullcuts. Principals and teachers in these districts reported that they avoided pulling students out of nonacademic classes to attend categorical instruction. Their rationale was that pulling disadvantaged students out of these activities penalized them by limiting them to academic instruction.

Table 9 presents the percentage of teachers who reported that categorical program students had missed various academic courses. Most teachers (86 percent) reported that categorical students missed reading; one-third reported that students missed mathematics. Though the data show that students miss social studies and science less often than other subjects, the results may reflect the fact that some schools do not teach science and social studies in all elementary grades.

Some 61 percent of the classrooms in our sample were served by three or more categorical programs. Moreover, about 40 percent of the classrooms had from one-quarter to one-half of the students pulled out for categorical instruction (see Table 6, above). Thus, the time available for teaching the core curriculum to the entire class was

Table 9

ACADEMIC COURSES MISSED BY STUDENTS PULLED OUT TO RECEIVE CATEGORICAL PROGRAM INSTRUCTION AS REPORTED BY 30 CLASSROOM TEACHERS

Courses Missed	% of Teachers Reporting Missed Classes
Science	26
Social studies	34
Language arts	49
Reading	86
Mathematics	37

limited. Table 10 shows the amount of time classroom teachers spent teaching the full class. Nearly 40 percent of the regular classroom teachers in our sample reported that the entire class was present for less than two hours per day. Less than one-sixth of the teachers reported spending four or more hours per day with their entire class.

To illustrate the fragmentation of the instructional day experienced by some teachers, Table 11 presents an actual daily schedule of students pulled out of a fourth grade class. According to the teacher, the students pulled out represent about half of the total class enrollment. Categorical programs were obviously not the only source of pullout disruption. Instrumental music, physical education and different recess times also contributed to the fragmentation.

2. Conflicts between core and categorical programs lead to staff tensions.

Staff tensions between core and categorical program teachers were reported in 75 percent of 20 schools and in 83 percent of the 36 classrooms for which we had complete data on this item. Most of the tensions concerned the distribution of responsibility for instructing and grading categorical program students. In at least one-third of the schools in which tensions were reported, classroom teachers were reluctant, and often failed, to send students out to the categorical classes. Categorical program teachers in 20 percent of the schools

Table 10

HOURS PER DAY SPENT BY 36 REGULAR CLASSROOM TEACHERS WITH THEIR ENTIRE CLASS

Hours	% of Teachers Reporting
0 to 1.99	39
2 to 3.99	47
4 or more	14

Table 11

ACTUAL CLASSROOM PULLOUT SCHEDULE

Time	Pullout Class	Student
8:15 a.m.	Brass	Todd
9:20	Physical Education	Denise, Hubert, Todd
9:30	Title I Reading	Eliseo, Alfred, Jon
9:45	Recess	Galen, Shane, Brent
10:00	ESL	Heidi, Alfred, Dillard
10:15	Title I Mathematics	Todd, Galen
10:50	Drums	Alfred
	ESL	Eliseo, Jon
11:00	Title I Mathematics	Tammy, Hubert
12:30 p.m.	ESL	Galen
12:45	Special Education	Heidi
12:55	Title I Reading	Denise, Tommy
1:00	Speech	Galen, Shane
1:25	Science	Whole class
1:30	Recess and Sharing	Eliseo, Jon

reported having to go to the core program classrooms to retrieve children scheduled for categorical classes. Classroom teachers acknowledged their failure to send students to categorical instruction, contending that frequent pullouts for categorical instruction disrupted their teaching.

A slightly different problem arose in regard to grading students who participated in the categorical programs. When students received instruction outside the regular classroom, the core teacher found it difficult to provide grades. In 25 percent of the schools, classroom teachers reported grading to be a problem, especially with ESL, bilingual, and special education students, who were away from the core program for long periods during the day.

Fairly small numbers of students appeared to be directly affected by staff tensions. Most teachers (64 percent) estimated that 25 percent or fewer of the students in their schools were affected; 14 percent reported that 26 to 50 percent of the students were affected; and 21 percent reported that 51 percent or more of the students were affected by staff tensions.

3. Categorical programs require excessive administrative time.

Categorical program teachers in half of the schools reported that their programs had excessive administrative requirements. These teachers reported spending from three to 20 hours per week on administrative work. Estimates of the amount of administrative work required specifically by categorical programs varied widely. Fifty percent of the categorical program teachers in the ten schools reporting this problem spent five hours or less per week on administrative requirements; 30 percent spent six to ten hours per week; and 20 percent spent 11 hours or more. In descending order of time required, the categorical programs were special education, bilingual, and Title I.

In six of the ten schools where teachers complained about administrative work, categorical program teachers indicated that from 6 percent to 50 percent of the students were also affected. The basic loss to students was the time that teachers devoted to administrative duties rather than to instruction.

4. Categorical programs result in minority student segregation for long periods.

Schools and classrooms were identified as having this problem if minority students were pulled out of integrated classrooms and grouped together for categorical instruction at least three hours per week. Because we wanted to avoid measuring student segregation resulting from the demographic composition of the student body, three schools with more than 60 percent minority enrollment were excluded from this analysis.

Based on principal, classroom teacher, and categorical program teacher reports, we found minority student segregation in 35 percent of the 17 schools that had less than 60 percent minority enrollment and in 31 percent of the classrooms in those schools. The proportion of students who spent time in segregated categorical instruction varied from 7 percent in some classrooms to 100 percent in others. On the average, about 38 percent of minority students in desegregated schools received some categorical instruction solely with students of the same

racial or ethnic group. And, on the average, these students spent 7.16 hours weekly, or about 30 percent of their total instructional time, in segregated groups.

5. The core and categorical programs are incompatible.

As noted in our earlier research, districts and schools sometimes interpreted the requirement that categorical programs supplement, not supplant, regular instruction to mean that federally funded instruction must differ in content or method from the regular program. As a result, core and categorical programs in the same school may teach the same subject using different methods or presenting material in different sequences.

We found some form of this problem in seven of the 20 schools in our sample. Most instances of incompatibility cited by our respondents concerned either reading or mathematics instruction. Teachers in five of the seven schools also reported that students who participated in categorical programs had difficulty catching up with their peers when they returned to the regular classroom. Teachers attributed these difficulties to the fact that categorical programs provide a more benign and supportive environment than the regular classroom--fewer students per teacher, more individual instruction, and greater opportunity for student-teacher contact. These features are the positive side of the "incompatibility" between regular and categorical programs. Without them, disadvantaged students might benefit less from their schooling.

6. The categorical program replaces the core program.

In our earlier study, we found that some schools attempted to reduce scheduling problems associated with categorical pullouts by allowing the categorical program to supplant the core program. That is, rather than provide the students with both the core and categorical instruction to which they are entitled, schools sometimes replaced the core program with the categorical program.

In the current study, regular program teachers in three of the sample schools and 16 percent of the sample classrooms reported that the categorical program replaced core reading and mathematics. Regular program teachers in these classrooms reported that approximately 30 percent of the categorical students missed core mathematics and 25 percent missed core reading.

Cross-subsidy. As noted above, cross-subsidy is the use of categorical program funds intended for one beneficiary group to provide services to another beneficiary group. Each of our 20 sample schools experienced at least one type of cross-subsidy (see Tables 3 and 5, above). Here we present findings about cross-subsidy in the order of the frequency of its occurrence in the 20 schools.

1. Teaching staff funded by one categorical program provide service in another.

This type of cross-subsidy occurs when districts and schools assign teaching staff who are paid by a funded categorical program to provide the instruction required by an unfunded or underfunded program. We found teaching staff cross-subsidies in 16 of the 20 schools in the sample. To describe a teaching staff cross-subsidy we asked two questions: (1) From which programs are teaching staff most likely to be diverted? (2) To which programs do they provide service?

Donor programs are those whose resources (e.g., staff, funds program materials, etc.) are diverted; *recipient* programs are those for which the diverted resources are used. In the case of teaching staff cross-subsidies, the donor programs are those to which staff salaries are charged; the recipient programs are those in which staff teach, but do not charge salary equivalent to the teaching time.

Table 12 shows the patterns of cross-subsidy among categorical programs. Though the relationships are complex, some programs clearly tend to be donor programs and others recipient programs.

The Title I program was a donor and a recipient with almost equal frequency. The bilingual programs were somewhat more frequently donors

Table 12

TEACHING STAFF CROSS-SUBSIDIES: DONOR AND RECIPIENT RELATIONSHIPS AMONG CATEGORICAL PROGRAMS

Program	% of Cases in Which[a]	
	Donor	Recipient
Title I reading, mathematics	30	27
Special education for learning disabled	4	36
Title VII bilingual, state bilingual, ESL	35	27
ESAA basic	4	0
Johnson-O'Malley	13	0
Title I migrant	8	5
Title I special education	4	0
State compensatory education	0	5

[a]Percentages are calculated on the basis of 23 instances in which programs were identified as donors and 22 instances in which they were identified as recipients. Instances of cross-subsidies exceeded the number of schools as several schools identified more than one teaching staff cross-subsidy.

of teaching staff than recipients of teaching staff.[1] Special education for the learning disabled was seldom the donor program and frequently the recipient of teaching staff cross-subsidies. Typically, Title I and bilingual program teachers and aides provided instructional service in the special education programs.

Multiple funding of positions--the practice of allocating a teacher's time among several funding sources--accounted for 26 percent of the instances of cross-subsidy. A teacher whose time is supported in part by, say, Title I, special education, a state compensatory program, and regular district funds can be assigned to a wide variety of tasks. Because a teacher with multiple funding may legitimately deliver almost any service at a given time, it is difficult to judge whether she is actually working in all of the programs that pay her. Multiple funding

[1]Cross-subsidies involving bilingual and ESL programs took two different forms. In one, teaching staff from one type of bilingual program (such as ESEA Title VII) were used to cross-subsidize a recipient bilingual program (such as a state bilingual program, Title I migrant, or ESAA Title VII). In the second, bilingual teachers and

therefore makes cross-subsidy easy to accomplish and difficult to detect.

More than half the instances of multiple funding occurred in small districts that had high proportions of disadvantaged students and received grants from several categorical programs. For those districts, multiple funding may simply be a way of allocating limited resources among large numbers of disadvantaged students..

2. Students eligible for one categorical program are served instead by another program.

This form of cross-subsidy involves assigning students eligible for an unfunded or underfunded program to a fully funded one. The programs through which students are served are the donors and the underfunded programs are the recipients of the cross-subsidies.

Principals and categorical program teachers in 16 of our sample schools reported this type of cross-subsidy. We asked the following questions at schools involved in student cross-subsidies: (1) Are there programs from which eligible students are more likely to be diverted (recipient programs)? (2) Are there programs through which students are most likely to be served (donor programs)? (3) Do students eligible for donor program services fail to receive them because of displacement by noneligible students?

Table 13 shows how programs subsidize one another. Title I was much more likely to be a donor than a recipient, and special education was clearly most often a recipient. The bilingual programs served as both donors and recipients of student cross-subsidies, although somewhat more often as recipients.

Table 14 provides data on the degree to which students eligible for services under donor categorical programs were denied services because of cross-subsidy. Few eligible students in the 16 sample schools that experienced this type of cross-subsidy were completely excluded from categorical program services. However, one-fourth of the principals and categorical program teachers in the 16 schools reported that 6 percent

---

aides were used in the classroom to assist other special education and Title I teachers.

Table 13

STUDENT CROSS-SUBSIDIES: DONOR AND RECIPIENT RELATIONSHIPS AMONG CATEGORICAL PROGRAMS

Program	% of Cases in Which[a]	
	Donor	Recipient
Title I reading, mathematics	66	9
Title VII bilingual, state bilingual, ESL	19	30
Special education for learning disabled	5	57
Johnson-O'Malley	0	4
Title I migrant	5	0
Title I special education	5	0

[a]Percentages are calculated on the basis of 21 instances in which programs were identified as recipients of cross-subsidies and 23 instances in which they were identified as donors. Instances of cross-subsidy exceeded the total number of schools as several schools had multiple student cross-subsidies.

or more of the students eligible for categorical program services were excluded because of cross-subsidy.

Table 14

PERCENTAGE OF ELIGIBLE STUDENTS EXCLUDED FROM CATEGORICAL PROGRAM SERVICES IN 16 SCHOOLS EXPERIENCING STUDENT CROSS-SUBSIDY

% of Students Excluded	% of Respondents Reporting Exclusion
0	31
1 to 5	44
6 to 10	19
11 to 15	6

3. Unfunded program administrative duties are assumed by staff of funded programs.

This type of cross-subsidy was reported in 8 of the 20 schools in the sample. The administrative duties were related to the unfunded mandates of Title IX (women's rights), Section 504 of the Rehabilitation Act of 1973 (rights of the handicapped), and affirmative action. No particular program could be identified as disproportionately supplying staff to handle the administrative duties of programs like Title IX.

Principals and categorical program teachers reported that little time was devoted to these unfunded administrative activities at the school level: staff spent, on the average, less than one hour per week on administrative tasks related to Section 504 and Title IX. This finding indicates that administrative staff cross-subsidies at the school level were not costly in terms of staff time. However, our respondents noted that the fulfillment of Title IX and Section 504 mandates originate at the district level and are typically handled by administrative staff at that level. Thus, an accurate assessment of the costs of administrative staff cross-subsidies requires further research at the district level.

4. Resources are diverted from funded programs to pay for unfunded programs.

None of the schools in the sample reported this type of cross-subsidy. Our earlier study found evidence of fund diversion (e.g., use of Title I and Title VII funds to remove physical barriers for handicapped students and to expand physical education facilities for females), but only at the district level.

III. CONCLUSIONS AND RECOMMENDATIONS

Interference and cross-subsidy occur in virtually all school districts that deliver federal or state categorical programs. The large number of federal programs exacerbates the problem. The more categorical programs there are, the more difficult it is for districts to avoid interference; the more numerous and costly unfunded mandates there are, the harder it is to avoid cross-subsidy.

Contrary to our expectations, however, interference and cross-subsidy may occur not only when there is a multiplicity of categorical requirements, but whenever a school system administers programs imposed by another government agency. One categorical program alone can create interference if local administrators do not take care to coordinate it with the regular instructional program. In a district that receives federal grant funds for any purpose, a single unfunded requirement creates the incentive for cross-subsidy.

This study confirms the conclusion of our earlier study (Kimbrough and Hill, 1981) that interference and cross-subsidy result both from the federal program structure, which encourages local districts to treat categorical programs as things apart from the schools' regular core curriculum and from local administrative habit, which separates categorical and core programs even more rigorously than federal rules require.

The importance of local administrative performance must not be underestimated. Interference almost always results from a local decision to keep categorical and regular program staff and resources separate. Cross-subsidy almost always results from a local decision to avoid using local revenues to pay for services required by a civil rights law. The importance of local decisions is underscored by the fact that some districts and schools have been able to avoid interference and cross-subsidy.

In our fieldwork, we encountered a small number of schools that successfully orchestrated the use of resources from the existing multiple categorical programs. Some principals carefully scheduled

categorical program pullouts to ensure that students did not miss regular classroom academic courses. Some principals also sent categorical program specialists into the regular classroom to enhance the regular classroom teacher's efforts on behalf of disadvantaged students. Some teachers coordinated categorical and regular class instruction so that the content and pacing of instruction are consistent among regular and categorical programs.

Such orchestration requires administrative creativity and a willingness to take small risks in interpreting program rules. Resources can be and are successfully organized by principals and teachers who simply will not allow these categorical program resources or their students' time to be wasted. Such success stories, if carefully documented and explored, might show local administrators the way to cope with the problems of categorical programs.[1]

Whether caused by federal requirement or local choices or both, the separation of categorical and core instructional programs adversely affects the services received by disadvantaged children. The separation blurs the lines of responsibility for these children's education. Regular classroom teachers know that multiple pullouts limit their opportunity to teach basic skills to categorical program students. Categorical program teachers know that disadvantaged students are supposed to receive some instruction in basic skills from regular classroom teachers. The existence of unfunded requirements also blurs district administrators' responsibility to ensure that students get the greatest benefits possible from categorical program funds.

In the course of this and our earlier study, district administrators pointed out that their ultimate responsibilities under federal programs are fiscal and bureaucratic: they must be prepared to demonstrate compliance with all of the categorical program rules and unfunded requirements that apply to them. Since each set of rules is enforced by a separate federal agency, district officials need to show compliance with only one requirement at a time. When they lack the funds to comply with all requirements simultaneously, district officials

[1]The appendix summarizes the few success stories that we found. We have sought (but not yet obtained) funding to explore successful local administrative solutions, describe them in detail, and explain how they were created.

have good reason to concentrate resources on those requirements that are most likely to be enforced. District officials, knowing that services to disadvantaged students are affected more by funding patterns and enforcement pressures than by assessments of students' needs, feel little responsibility for those students' educational progress.

The lack of clear responsibility for the education of disadvantaged students is the very problem that categorical programs were designed to solve. The basic rationale for ESEA Title I, PL 94-142, and similar programs was that school systems needed extra funds and special incentives to serve disadvantaged children. District funded instructional programs focused on average students, and the schools generally did not consider themselves responsible for meeting the special needs of the poor, minorities, and the handicapped.

Categorical grant programs were meant to enable districts to supplement their regular instructional services. The regulations that accompanied those funds were meant to hold local officials responsible for disadvantaged children's education. The funding side of the strategy has been a success: federal funds get to the neediest districts and are used to supplement the instructional services purchased with local resources. The regulatory side of the strategy has, however, changed the form of the problem without solving it.

These facts establish the dilemma that faces any federal or state effort on behalf of education for the disadvantaged. Localities acting on their own initiative and with their own funds are unlikely to meet the needs of disadvantaged students. Unregulated block grants do not focus attention on the disadvantaged (see, for example, Darling-Hammond and Marks, 1983). Finally, the existing categorical grant and regulatory programs are not doing the job.

Federal and state policymakers who want to continue the effort to help disadvantaged children face a difficult program design problem. They must find a way to provide localities with the grant funds that such services require, to create regulatory pressures ensuring that the funds are used for the disadvantaged, and to avoid the problems documented in this report.

The solution can be described, at least in general terms. It must require school districts to deliver services specially tailored to the needs of the disadvantaged, without reducing the regular classroom teachers' responsibility and control over the students' overall educational experience.

Disadvantaged students who can be assigned to regular classrooms--i.e., all but the handicapped who need self-contained or institutional placements and new immigrants who speak no English--must *not* be assigned to separate categories dictated by the structure of federal grants and requirements. Classrooms to which such students are assigned should receive extra resources (e.g., more teachers per pupil, aids, instructional materials, and equipment). But those students and the resources assigned on their behalf should not be kept apart from regular classroom activities.

Extra revenues provided by categorical programs should be used to adapt regular classroom services so that disadvantaged children can benefit from them. Such resources should not be used to create instructional programs separate from (or in competition with) regular classroom activities.

The details of the solution are less easy to prescribe. Federal and/or state regulations must provide verifiable standards to ensure that program funds fully increase the levels of resources available in classrooms that serve disadvantaged children. Such regulations should not, however, require that funds be used only for specific instructional activities or only for specific students. There is nothing wrong with maintaining separate federal programs for separate groups of students. Congress should continue to establish separate grant mechanisms and appropriations for different groups, but the separateness of federal grant programs should end at the classroom door.[2] Principals and regular classroom teachers must get help in learning how to use and orchestrate the resources that become available to them.

---

[2]See Hill (1982) for a detailed discussion of ways that federal funds can be kept separate above the classroom level but consolidated in the classroom.

As this is written, the opportunity exists for a careful review and improvement of the federal program structure. The 1981 Educational Consolidation and Improvement Act continues to be vaguely defined; it is ripe for refinement, through both statutory amendment and regulation. If that effort were broadened to include all of the existing major categorical programs--for low-achieving students in poverty schools, children in desegregating school districts, limited English-speaking children, Indians and migrants, and handicapped children who do not need self-contained or institutional placements--it could produce a workable new federal program model. Without such a new model, federal policy will continue to swing back and forth between the two inadequate strategies, i.e., unregulated block grants and fragmented multiple categorical programs.

Appendix

SOME SUCCESS STORIES

As both our aggregate effects studies have shown, districts of all types experience severe problems implementing multiple categorical programs. However, we encountered few instances of interference or cross-subsidy which could not have been ameliorated with concerned, inventive management strategies. Moreover, we visited some districts and schools that had developed strategies for reducing or eliminating those problems.

One school in a low-income, multiethnic neighborhood avoided interference between regular and special programs almost entirely. The principal assigned the staff to four groups: three composed of core program teachers and one composed of all the categorical program specialist teachers. Each group met during one week to discuss common problems, scheduling and resource conflicts, and promising ideas. In addition, the principal conducted a weekly meeting between the specialist teacher group and one of the regular classroom teacher groups. The sole agenda for that meeting was the control of interference: the principal pressed both sets of teachers to identify any problems in monitoring the schedules and subject matter emphasis of regular and special programs. The principal then forced an open discussion of the problem and either approved the teachers' joint solution or imposed his own.

In another school, the principal employed a different method of reducing interference: he encouraged core program and categorical program teachers to visit and observe in one another's classroom. Teachers were permitted to leave their classes under the supervision of aides for short periods of classroom observation. Core and categorical program teachers thus gained a concrete appreciation of one another's goals and problems. That made it far easier for them to build complementary services for students.

In several schools, principals and other school-level administrators developed procedures for equitably distributing additional administrative tasks among core and categorical program staff. Planning sessions were held every six weeks during which the staff listed all special student events that required supervision, all meetings that had to be attended, and all reports that were due. Teachers then volunteered for tasks (and/or the principal made task assignments) publicly, with the whole staff sharing the administrative duties more or less equitably.

In addition to school-based efforts to reduce problems of interference, we encountered one instance of a district-based effort. To reduce scheduling and content conflicts between the core and categorical programs, district administrators (with school input) developed district-wide performance objectives and established district-wide goals for each content area, with core and categorical programs complementing one another in terms of methods and materials used.

At the school level, the categorical program teachers and the core program teachers met on a regularly scheduled basis to discuss ways of meeting the district objectives. Also on a regularly scheduled basis, the categorical program teachers met with the core program teachers to clarify scheduling problems; to maintain continuity of homework for students enrolled in both core and categorical programs; and to serve as problem-solvers in achieving the district-wide objectives.

REFERENCES

Berke, Joel, and Elizabeth Demarest, "Alternatives for Future Federal Programs," in M. Williams (ed.), *Government in the Classroom: Dollars and Power in Education*, Academy of Political Science, New York, 1979.

Darling-Hammond, Linda, and Ellen L. Marks, *The New Federalism in Education: State Responses to the 1981 Education Consolidation and Improvement Act*, The Rand Corporation, R-3008-ED, February 1983.

Goor, Janet, Mary Moore, Elizabeth Demarest, and E. Farris, *School Districts Participating in Multiple Federal Programs*, National Center for Educational Statistics, FRSS Report No. 7, Winter 1978-1979.

Hill, Paul T., "A Framework for Education Consolidation," in Joel D. Sherman, Mark A. Kutner, Kimberly J. Small (eds.), *New Dimensions of the Federal-State Partnership in Education*, Institute for Educational Leadership, Inc., Washington, D.C., 1982, pp. 145-155.

Kimbrough, Jackie, and Paul T. Hill, *The Aggregate Effects of Federal Education Programs*, The Rand Corporation, R-2638-ED, September 1981.

National Institute of Education, *Administration of Compensatory Education*, U.S. Department of Health, Education, and Welfare, Washington, D.C., 1977.

National School Boards Association, *Local Public School Survey*, Arlington, Virginia, 1976.

Silverstein, Robert, *An Introductory Overview Concerning the Basis for and Clarity and Restrictiveness of the Program Requirements Applicable to Local School Districts Applying for Grants under Title I, ESEA*, Lawyers' Committee for Civil Rights Under Law, Washington, D.C., 1977.